

Henny Penny Blast Chiller/Freezer Models BCC/BCR-140 Models BCC/BCR-175 Models BFR/BCR-350

SERVICE MANUAL

Henny Penny Blast Chiller/Freezer



BFR/BCR-350



BCC/BCR-140



BCC/BCR-175

LIMITED WARRANTY FOR HENNY PENNY APPLIANCES

Subject to the following conditions, Henny Penny Corporation makes the following limited warranties to the original purchaser only for Henny Penny appliances and replacement parts:

NEW EQUIPMENT: Any part of a new appliance, except lamps and fuses, which proves to be defective in material or workmanship within two (2) years from date of original installation, will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor. To validate this warranty, the registration card for the appliance must be mailed to Henny Penny within ten (10) days after installation.

REPLACEMENT PARTS: Any appliance replacement part, except lamps and fuses, which proves to be defective in material or workmanship within ninety (90) days from date of original installation will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor.

The warranty for new equipment and replacement parts covers only the repair or replacement of the defective part and does not include any labor charges for the removal and installation of any parts, travel or other expenses incidental to the repair or replacement of a part.

EXTENDED FRYPOT WARRANTY: Henny Penny will replace any frypot that fails due to manufacturing or workmanship issues for a period of up to seven (7) years from date of manufacture. This warranty shall not cover any frypot that fails due to any misuse or abuse, such as heating of the frypot without shortening.

0 TO 3 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for parts, labor, or freight. Henny Penny will either install a new frypot at no cost or provide a new or reconditioned replacement fryer at no cost.

3 TO 7 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for the frypot only. Any freight charges and labor costs to install the new frypot as well as the cost of any other parts replaced, such as insulation, thermal sensors, high limits, fittings, and hardware, will be the responsibility of the owner.

Any claim must be represented to either Henny Penny or the distributor from whom the appliance was purchased. No allowance will be granted for repairs made by anyone else without Henny Penny's written consent. If damage occurs during shipping, notify the sender at once so that a claim may be filed.

THE ABOVE LIMITED WARRANTY SETS FORTH THE SOLE REMEDY AGAINST HENNY PENNY FOR ANY BREACH OF WARRANTY OR OTHER TERM. BUYER AGREES THAT NO OTHER REMEDY (INCLUDING CLAIMS FOR ANY INCIDENTAL OR CONSQUENTIAL DAMAGES) SHALL BE AVAILABLE.

The above limited warranty does not apply (a) to damage resulting from accident, alteration, misuse, or abuse; (b) if the equipment's serial number is removed or defaced; or (c) for lamps and fuses. THE ABOVE LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS, AND ALL OTHER WARRANTIES ARE EXCLUDED. HENNY PENNY NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY.

TABLE OF CONTENTS

Section		Page
Section 1.	INTRODUCTION	1-1
	1-1. Henny Penny Blast Chiller	1-1
	1-2. Features	
	1-3. Proper Care	1-1
	1-4. Assistance	
	1-5. Safety	1-2
Section 2.	INSTALLATION	2-1
	2-1. Introduction	
	2-2. Unpacking	2-1
	2-3. Electrical	
	2-4. Location	2-3
	2-5. Refrigerant Information	2-4
Section 3.	OPERATION	3-1
	3-1. Introduction	3-1
	3-2. Operating Controls	3-1
	3-3. Basic Operation	3-4
	3-4. De-Icing	3-7
	3-5. Cleaning	3-8
	3-6. Seasonal or Prolonged Shutdown	3-9
	3-7. Programming	3-10
Section 4.	TROUBLESHOOTING	4-1
	4-1. Introduction	4-1
	4-2. Troubleshooting	4-1
Section 5.	WIRING DIAGRAMS AND PARTS INFORMATION	5-1
	Wiring Diagram - BCC-140/175	
	Wiring Diagram - BCR-140/175	
	Wiring Diagram - BCR-350	
	Parts List	

SECTION 1. INTRODUCTION

1-1. BLAST CHILLER/

The Henny Penny Blast Chiller are designed to carry out fast refrigeration of food products. The units are electronically controlled for easy use and for consistent operation. The BCC/BCR-140, will chill up to 140 lbs (65 kg) of product, the BCC/BCR-175 will chill up to 175 lbs (80 kg), and the BCR-350 will chill up to 350 lbs (160 kg) of product. The BFR-350 chills and freezes up to 350 lbs. (160 kg) of product.

1-2. FEATURES

- Interior and Exterior made of 304 Stainless Steel
- Electronic Controls with Self Diagnostics
- Manual De-icing of the Interior by Electrical Heater
- Multi-Sensored Frigiprobe food probe
- Easily Maintained
- The BCC-140 and BCC-175 have water cooled condensing units
- The BCR-140, BCR-175, and BCR-350 are shipped without condensing units
- HACCP Printer capabilities
- The BCC/BCR-140 and 175 can use the combi, MOR-20
- The BFR and BCR-350 can use the combi, MOR-40

1-3. PROPER CARE

As in any unit of food service equipment, the Blast Chiller does require care and maintenance. Suggestions for the proper care and maintenance are contained in this manual.

The conscientious use of the recommended procedures, coupled with regular maintenance, will result in few repairs to the equipment. When such repairs are required, they may be accomplished by following the repair steps contained in this manual.

1-4. ASSISTANCE

Should you require outside assistance, just call your local independent distributor maintained by Henny Penny Corporation.

In addition, feel free to contact our corporate headquarters in Eaton, Ohio. Dial 800-417-8405 toll free, or 937-417-8405.

201 1-1

1-5. SAFETY

The Henny Penny Blast Chiller has may safety features incorporated. However, the only way to ensure a safe operation is to fully understand the proper installation, operation, and maintenance procedures. The instructions in this manual have been prepared to aid you in learning the proper procedures. Where information is of particular importance or safety related, the words WARNING, CAUTION, and NOTE are used. Their usage is described below.

WARNING

The word WARNING is used to alert you to a procedure, that if not performed properly, might cause personal injury, such as burns and/or loss of sight, and damage to the unit.

CAUTION

The word CAUTION is used to alert you to a procedure that, if not performed properly, may damage the unit, or product.

NOTE

The word NOTE is used to highlight especially important information.

1-2

SECTION 2. INSTALLATION

2-1. INTRODUCTION

This section provides the installation for the Henny Penny Blast Chiller.

NOTE

Installation of this unit should be performed only by a qualified service technician.

WARNING

Do not puncture the skin of the Blast Chiller with drills or screws, as component damage or electrical shock could result. Also, if the unit is shipped with a compressor, **Do Not** lay the unit on its side. If the unit has been on its side, the unit must be in an upright position for at least an hour before power is applied to the unit. Check all components for signs of being loose or damaged, and make sure the system has refrigerant. Failure to follow these instructions may cause damage to the components.

2-2. UNPACKING

The Henny Penny Blast Chiller has been tested, inspected, and expertly packed to insure arrival at its destination in the best pos sible condition. The cabinet rests on a wooden skid and is then packed inside a wooden box with sufficient padding to withstand normal shipping treatment.

NOTE

Any shipping damage should be noted in the presence of the delivery agent and signed prior to his or her departure.

To remove the Henny Penny Blast Chiller from the box, you should:

- 1. Carefully cut banding straps.
- 2. Remove box from around unit.
- 3. Lift the unit off the skid.

WARNING

The BCC/BCR-140 and BCC/BCR-175 weighs between 400 (181 kg) and 550 lbs (249 kg), and the BFR and BCR-350 weigh approximately 770 lbs (350 kg). Take care when lifting units to prevent personnal injury.

201

2-2. UNPACKING (Continued)

- 4. Open door and remove packing from the inside of the unit.
- Peel off any protective covering from the exterior of the 5. cabinet
- 6. Your Blast Chiller is now ready for operation.

CAUTION

If the blast chiller has been laid on its side, the unit must be sitting upright for at least an hour before applying power to the unit. Check all components for signs of being loose or damaged, and make sure the system has refrigerant. Failure to follow these instructions may cause damage to the components. Failure to follow these instructions could cause damage to the compressor.

NOTE

Be certain to save any literature that is packed inside the cabinet, or separate boxes.

2-3. ELECTRICAL

• 200 V, 50-60 Hz, 3 phas

• 208-240 V, 60 Hz, 3 phase

• 230 V, 50 Hz., 1 phase

• 200 V, 50-60 Hz, 3 phase **BCC-175**

> • 208-240 V, 60 Hz, 3 phase • 400 V, 50 Hz., 3N phase

BCR-140 and 175 • 208-240 V, 60 Hz, single phase

> • 230 V, 50 Hz, single phase • 200 V, 50-60 Hz., single phase

BFR and BCR-350 • 200 V, 50-60 Hz, 3 phase

• 208-240 V, 60 Hz, 3 phase

• 400 V, 50 Hz., 3N phase

The data plate, located inside of the unit, will specify the correct electrical supply. The unit requires a grounded receptacle with a separate electrical line protected by a fuse or circuit breaker of the proper rating.

WARNING

The cabinet must be adequately and safely grounded according to local electrical codes to prevent the possibility of electrical shock.

2-2 201

2-3. ELECTRICAL (Continued)

Refer to the table below for electrical ratings for both models.

Model No.	Volts	Watts	Amps	Freq.	Phase
BCC-140	200	4700	18	50/60	3
	208-240	4700	18	60	3
	230	4700	20	50	1
BCC-175	200	5800	20	50/60	3
	208-240	5800	20	60	3
	400	5800	9	50	3N
BCR-140	208-240	2400	12	60	1
	230	2400	10	50	1
	200	2400	12	50-60	1
BCR-175	200	2400	12	50/60	1
	208-240	2400	12	60	1
	230	2400	12	50	1
BFR &	200	4100	15	50/60	3
BCR-350	208-240	4100	15	60	3
	400	4100	10	50	3N

2-4. LOCATION

The Blast Chillers should be placed in an area where the doors can be opened, for loading and unloading, without interruption. For proper operation, the cabinet must be level.

For maximum efficiency, if the air temperature of the premises is more than 100° F (38° C), the room should have adequate ventilation, taking into account for the heat emitted by the unit.

Clearances should be as follows:

BCC/BCR-140	R-140 Top 16 in. (400 mm) for air circulation	
	Left Side 4 in. (100 mm) for air circulation	
	Right Side . 8 in. (200 mm) for air circulation	
	Back 4 in (100 mm) for air circulation	
	Front 26 3/8 in (668 mm) for door swing	
BCC/BCR-175	Top 16 in. (400 mm) for air circulation	
	Sides 3 in. (70 mm) for air circulation	
	Front 33 3/8 in. (847 mm) for door swing	
BFR &	Top 16 in. (400 mm) for air circulation	
BCR-350	Sides 3 in. (70 mm) for air circulation	
Pass Thru	- Front and Back 38 1/8 in (970 mm) for door swing	
Solid Back-	-Front	
	Back 4 in. (100 mm) for air circulation	

2-5. REFRIGERANT INFORMATION

	Refrigerant Type	Amount of Refrig.	Design Pi High	ressure Low
BCC-140	R404A	6 lbs. (2.7 kg)	406 psig (28 bar)	102psig (7 bar)
BCC-175	R404A	5.5 lbs. (2.4 kg)	406 psig (28 bar)	102 psig (7 bar)

2-6. REFRIGERATION CAPACITIES

BCC/BCR-140

-4° F (-20° C) at 6,800 BTU/hr (2.0 kw) 32° F (0° C) at 16,000 BTU/hr (4.7 kw)

BCC/BCR-175

-4° F (-20° C) at 11,300 BTU/hr (3.3 kw) 32° F (0° C) at 38,800 BTU/hr (9.0 kw)

BCR-350

-4° F (-20° C) at 25,000 BTU/hr (7.3 kw) 32° F (0° C) at 58,000 BTU/hr (17.0 kw)

BFR-350

-4° F (-20° C) at 81,900 BTU/hr (24.0 kw) -40° F (-40° C) at 35,500 BTU/hr (10.4 kw)

2-4 201

SECTION 3. OPERATION

3-1. INTRODUCTION

This section provides operating procedures for the Blast Chiller. Sections 1, 2, and 3 should be read, and all instructions should be followed before operating the cabinet.

This section contains an explanation of all controls and components and information on operating procedures and daily maintenance.

CAUTION

If the blast chillers (that have compressors shipped with them) have been laid on its side, the unit must be sitting upright for at least an hour before applying power to the unit. Check all components for signs of being loose or damaged, and make sure the system has refrigerant. Failure to follow these instructions may cause damage to the components. Failure to follow these instructions could cause damage to the compres sor.

3-2. OPERATING CONTROLS

Pages 3-1 to 3-4 identifies and describes the function of all the operating controls.

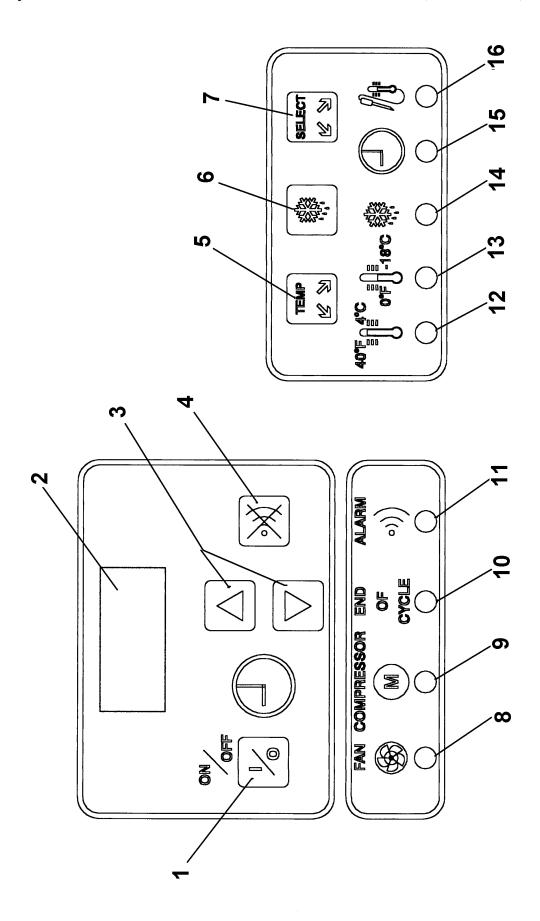
Fig. No.	Item No.	Description	Function
3-1	1	On/Off Button	The On/Off button, when pressed, is a button on the control panel that starts a chilling cycle. It also must be pressed before any changes to the controls can be made, and to start and stop the De-ice cycle.
3-1	2	Digital Display	The Digital Display shows the temperatures, the time (in a timing cycle), and the information in the technical mode.
3-1	3	Up and Down Arrows	The Up and Down Arrows are used when changing times or settings.
3-1	4	Alarm Button	The Alarm button is used to stop the optional alarm buzzer and to enter the technical mode.
3-1	5	Temp Button mode.	The Temp button is used to select either the chilling
3-1	6	De-ice Button	The De-ice button is used to remove ice that may have formed on the evaporator during a chilling cycle.

3-1

3-2. OPERATING CONTROLS (Continued)

Fig. No.	Item No.	Description	Function
3-1	7	Select Button	The Select button is used to choose between a timing cycle or a cycle using the food probe.
3-1	8	Fan LED	The Fan LED is a green light which illuminates when the fan is running.
3-1	9	Compressor LED	The Compressor LED is a green light which illuminates when the compressor is running.
3-1	10	End-of-Cycle LED	The End-of-Cycle LED is a green light which illuminates at the end of a timing cycle, or food probe cycle.
3-1	11	Alarm LED	The Alarm LED is a red light which illuminates when the unit senses a fault in the system. (Ex: AL 1, AL 2, etc.).
3-1	12	Chill LED	The Chill LED is a green light which illuminates when the chilling mode is selected.
3-1	13	Freeze LED (Only applicable on BFR units)	The Freeze LED is a green light which illuminates when the freezing mode is selected.
3-1	14	De-ice LED	The De-ice LED is a green light which illuminates when the de-ice button is pressed.
3-1	15	Timer LED	The Timer LED is a green light which illuminates when the timing cycle is selected.
3-1	16	Frigiprobe LED	The Frigiprobe LED is a green light which illuminates when the food probe mode is selected.

201 3-2



3-3

3-3. BASIC OPERATION

The Henny Penny Blast Chillers can chill food products with a core temperature of 149°F (65°C), down to 40°F (4°C) within 4 hours (room ambiant temperature may impact time it takes to reach the desired temperature). But, for the above statements to be accurate, the following conditions must be met:

- a. The food product must not be thicker than $1\frac{3}{4}$ to 2 inches (40 to 50 mm.)
- b. Meats should be placed directly onto the racks, but products in pans should be covered if possible. The steam from the product can form ice on the evaporator, which will increase the chilling or freezing time.
- c. A minimum clearance of 1 inch (25 mm) between pans.
- d. The best dishes or pans to use are stainless steel or aluminum. Do not use polycarbonate (plastic) pans. The polycarbonate acts as an insulator around the food product and makes it hard to chill.
- e. Do not exceed the product weight capacity specified by the particular model of blast chiller. The BCC/BCR-140 has a 140 lbs.(65 kg) capacity, the BCC/BCR-175 has a 175 lb. (80 kg) capacity, and the BCR-350 has a 350 lb. (160 kg.) capacity.

Start-up

- 1. Load all the product at one time, so the door does not need to be opened while in operation.
- 2. If using the food probe, place probe into product that is located on the left side, middle of the unit.
- 3. Press the ON/OFF button to turn unit on. The fan and compressor LEDs should come on after 25 seconds.
- 4. Press the Temp button to select the chilling mode. (Chill mode or freeze mode can be selected on BFR units).

NOTE

The chilling LEDs, and the timing or food probe LEDs, will stay on with the power switch turned to the OFF position.

201 3-4

3-3. BASIC OPERATION (Continued)

5. Press the Select button to choose the food probe mode or the timing mode. With the Frigiprobe mode selected, the digital display will alternately show the core temperature of the product, and the elapsed time of the cycle. If the timing mode is selected, the digital display will alternately show the air temperature and the time (hours and minutes) remaining in the cycle.

NOTE

The buzzer will sound 1 minute after the food probe mode is selected, unless the temperature is above 140°F (60°C). Then the buzzer will sound when 140°F (60°C) is reached.

6. Set the time in the timing cycle, if necessary, using the Up and Down buttons. The time is affected by the thickness of the food product, weight, food loading temperature, and food's packaging. The buzzer will sound 1 minute into the timing cycle.

NOTE

Avoid opening the door once the cycle has started. This will lengthen the time it takes to reach the desired temperature.

- 7. At the end of the cycle (40°F (4°C) in the food probe mode) the buzzer will sound and the unit will automatically start the hold cycle. The buzzer will sound for 30 seconds, or press the Alarm button to stop it. In the hold cycle, the product will be held at 37°F (3°C) in the chilling mode.
- 8. The product can remain in the unit for up to 12 hours, or can be removed from the unit and placed in a cold storage case.

3-5 300

3-3. BASIC OPERATION (Continued)

A temperature conversion chart is provided for your convenience:

Temperature Conversion Chart

88°C	190°F
80°C	176°F
70°C	158°F
65°C	149°F
60°C	140°F
50°C	122°F
40°C	104°F
30°C	86°F
10℃	50°F
4°C	40°F
0°C	32°F
-10°C	14°F
-20°C	-4°F
-30°C	-22°F
-40°C	-40°F

3-4. DE-ICING

Henny Penny recommends to perform the de-icing process after every 3 cycles, and at the end of each day. This will eliminate any ice that may have formed around the evaporator during the chilling cycle. Failure the follow this procedure will increase the time it takes to cool the product and may lead to unsafe product.

- 1. Remove all product from the unit.
- 2. Close the door.
- 3. Press the ON/OFF button to turn the unit on.
- 4. Press the De-ice button. The digital display will now show "d. 01". The compressor will not come on, but the evaporator fan will come on and pull warm air across the evaporator, created by the de-icing elements.
- 5. Allow the de-ice cycle to run for a minimum of 10 minutes and a maximum of 25 minutes. The unit will automatically turn off when the evaporator has been de-iced, and reached a temperature of 77°F (25°C).

NOTE

If the above procedures does not remove all the ice from the evaporator, the length of time, and the temperature at which the de-ice cycle turns the unit off, can be adjusted. See the Programming section.

3-7 100

3-5. CLEANING

Daily:

- 1. Remove all electrical power supplied to the unit by turning off the wall circuit breaker.
- 2. Remove all product from the unit.
- 3. Remove the racks and pans from the unit and clean with soap and water at a sink.
- 4. Clean all surfaces with a soft cloth, soap and water. DO NOT USE ABRASIVE CLEANSERS.

CAUTION

DO NOT use abrasives, such a steel wool, or abrasive cleaners, such as, chlorine, bromine, iodine, or ammonia chemicals to clean the unit. These will deteriorate the stainless steel and greatly reduce the life of the unit.

5. Clean around the electronic controls and the door seal with a soft, damp cloth.

CAUTION

DO NOT use large quantities of water, or a spray hose to clean the unit. Damage to the components could result.

6. Reconnect the electrical power to the unit and unit is now ready for operation.

Monthly: BCC-140 Only

At least once a month the air condenser needs to be cleaned of dust or obstructions for the unit to run effeciently and to reduce energy use of the unit.

- 1. Remove all electrical power supplied to the unit by unplugging the power cord from the wall, or by turning off the wall circuit breaker.
- 2. Using a flathead screwdriver, remove the screws from the front panel of the unit. Pull panel down and press in on the side of the panel to release the tabs, and remove the panel from the unit.

300 3-8

3-5. CLEANING (Continued)

- 3. Use a vacuum cleaner, or soft brush to remove the dust, or other obstructions from the condenser.
- 4. Finish cleaning with compressed air if possible.

CAUTION

DO NOT use a wire brush to clean the condenser, or damage to the condenser could result.

5. Replace the front panel, and reconnect the electrical supply, and unit is now ready for use.

3-6. SEASONAL OR PROLONGED SHUTDOWN

- 1. Remove all electrical power supplied to the unit by turning off the wall circuit breaker.
- 2. Make sure the inside of the unit is clean and completely dry.
- 3. Leave the door slightly ajar to prevent smells from developing inside the unit.

3-9 201

3-7. PROGRAMMING

Information about the operation settings can be accessed by pressing the Alarm button. These settings can also be changed while in the different steps. The following information can be accessed:

NOTE

After pressing the Alarm button, a delay will occur before the desired number will appear in the display, and the number in the left column will show for 2 seconds. You then only have 12 seconds to change the setting.

- 0 1. Not Available at this time.
 - 2. Not Available at this time.
 - **3. Internal air temperature.** Press the Alarm button three times and the digital display will show the air temperature during a food probe cycle.
 - **4. Evaporator temperature.** Press the Alarm button 4 times and the digital display will show the evaporator temperature during the de-icing cycle.
 - 5. Type of program setting indicated by the jumper link located on the control board. Press the Alarm button 5 times and the digital display will show a number between 5 and 9, which indicates the position of the jumper on the control board. The control panel area does not have to be accessed to obtain the information. (See chart at left). Henny Penny controls should show a "6" in the display.
 - **6.** Temperature of the holding cycle, after the chilling. Press the Alarm button 6 times and the digital display will show the air temperature. This is the temperatures the unit will stay at during the hold cycle.

00

01

02

03

04

APPLICATION	Jump link position	Code N°
Blast Chiller without frigiprobe (Quick Freezing operation impossible)		5
Blast Chiler with frigiprobe (Quick Freezing operation impossible)		6
Blast Chiller / Freezer (mixed) without Frigiproge		8
Blast Chiller / Freezer (mixed) with Frigiproge		9

05

300 3-10

The holding temperature can be changed at this time by using the Up and Down buttons. Factory setting for air temperature is 37°F (3°C). The minimum temperature setting is 32°F (0°C), and the maximum temperature is 50°F (10°C).

06

7. Maximum duration of de-icing cycle (minutes). Press the Alarm button 7 times and the digital display will show the time duration of the de-icing cycle. The factory setting is 25 minutes, but this can be changed to a maximum setting of 60, or a minimum of 25, by using the Up and Down buttons.

07

8. Evaporator temperature for the end of de-icing cycle. Press the Alarm button 8 times and the digital display will show the evaporator temperature at which the controls will automatically turn off the de-icing cycle. The factory setting is 77°F (25°C), but this can be changed to a maximum setting of 59°F (15°C), or the minimum of 50°F

(10°C), by using the Up and Down buttons.

08

9. Temperature differential before high air temperature alarm. Press the Alarm button 9 times and the digital display will show the number of degrees, above the holding temperature, at which an alarm will sound, indicating the hold temperature is too high.

The factory air temperature setting is 27°F (15°C), but can be changed to a maximum setting of 54°F (30°C), or a minimum temperature of 7°F (4°C) by pressing the Up or Down buttons.

09

10. Temperature differential before low air temperature alarm. Press the Alarm button 10 times and the digital display will show the number of degrees, below the holding temperature, at which an alarm will sound, indicating the hold temperature is too low.

The factory air temperature setting is 27°F (15°C), but can be changed to a maximum setting of 54°F (30°C), or a minimum of 18°F (10°C) by pressing the Up and Down buttons.

3-11

10

11. The duration of time the temperatures, (in 9 and 10 above), must remain at before the alarms will sound.

Press the Alarm button 11 times and the digital display will show the time at which the high and low temperatures (no. 9 and 10 above) must remain at, before the alarm will sound.

The factory setting is 20 minutes, but can be changed to a maximum setting of 60 minutes, or a minimum of 10 minutes by pressing the Up and Down buttons.

This means, that the temperature must remain at a too high, or too low temperature for 20 minutes before an alarm will sound.

12. International Only. A Frigiprobe sensor temperature which can turn off the compressor, in a chilling cycle, to prevent freezing of the product. Press the Alarm button 12 times and the digital display will show the temperature, at which a sensor in the Frigiprobe will turn off the compressor during a Frigiprobe mode. This will prevent the outer surfaces of the product from freezing, however the

cooling time will be greatly increased.

The factory setting is 39°F (4°C), but can be changed to a maximum setting of 122°F (50°C), or a minimum of 32°F (0°C) by pressing the Up and Down buttons.

NOTE

Do not change this setting lower than the setting used in parameter 22, (next page).

NOTE

This function will only activate when the factory setting is changed to above 40°F (4°C). **England must have a setting** of 3°C (37°F).

13. Re-initialize the controls to factory settings. Press the Alarm button 13 times and the digital display will show "dEF", at which time the Up button is pressed and the unit will shut down. Re-initialization is now complete.

NOTE

After re-initialization, the controls will default back to factory settings. The temperature will be in Celsius and the values in steps 12, 16, and 18, of this section, will need to checked to be accurate for the country in which the unit is installed.

11

12

300

20

14. Blast chilling, low side air temperature limit, when using the Frigiprobe, in step 12 of this section. Press the Alarm button 14 times and the low side air temperature, at which the compressor cycles on and off, will show in the display. This temperature is used in preventing the product from freezing, while in the chilling mode, which is described in step 12.

The factory setting is -4°F (-20°C), but can be changed to a maximum setting of 32°F (0°C), and a minimum setting of -31°F (-35°C), by using the Up and Down buttons.

21

15. Blast chilling, high side air temperature limit, when using the Frigiprobe, in step 12 of this section. Press the Alarm button 15 times and the high side air temperature, at which the compressor cycles on and off, will show in the display. This temperature is used in preventing the product from freezing, while in the chilling mode, which is described in step 12.

The factory setting is 32°F (0°C), but can be changed to a maximum setting of 50°F (10°C), and a minimum setting of 23°F (-5°C), by using the Up and Down buttons.

22

16. Frigiprobe, end of cycle temperature setting. Press the Alarm button 16 times, and the temperature at which ends the food probe cycle and starts the hold cycle, will show in the display.

The factory setting is 39°F (4°C), but can be changed to a maximum setting of 50°F (10°C), and a minimum setting of 32°F (0°C), by using the Up and Down buttons.

NOTE

The maximum settings for U.S.A. is **39°F (4°C)**, and for England is **37°F (3°C)**.

3-13 300

23

17. Frigiprobe temperature for when the buzzer sounds at the start of a cycle. Press the Alarm button 17 times, and the temperature that the buzzer will sound when the product has reached the "danger zone" temperature, and must be cooled to a "safe" temperature within the recommended time, will be shown in the display.

The factory setting is 140°F (60°C), but can be changed to a maximum setting of 176°F (80°C), and a minimum setting of 122°F (50°C), by using the Up and Down buttons.

NOTE

The settings for the U.S.A. must be 140°F (60°C) and for England, 158°F (70°C).

30

18. Selecting Fahrenheit or Celsius. Press the Alarm button 18 times and °F or °C will show in the display. Use the Up and Down buttons to toggle from °F to °C, or vice versa.

100 3-14

SECTION 4. TROUBLESHOOTING

4-1. INTRODUCTION

This section provides troubleshooting information in the form of an easy to read table.

If a problem occurs during the first operation of a new cabinet, recheck the installation per section 2 of this manual.

Before troubleshooting always recheck the operating procedure per section 3 of this manual.

4-2. TROUBLESHOOTING

To isolate a malfunction proceed as follows:

- 1. Clearly define the problem (or symptom) and when it occurs.
- 2. Locate the problem in the troubleshooting table.
- 3. Review all possible causes, then one-at-a-time work through the list of corrections until the problem is solved.

WARNINGS

In the event of a system failure, the digital display will show an alarm message. These messages are coded; "AL 1", "AL-2", "AL-3", "AL-5", and "AL-6". When an alarm occurs, the red alarm LED will illuminate and a buzzer (optional) will sound. Press the Alarm button to stop the buzzer.

NOTE

The unit can operate on Auto Back-up if an alarm sounds for a faulty probe. Must select the timing mode, and enter a time.

Display	Cause	Correction
AL-1	Faulty air temperaure probe	Replace the probe. Unit can operate on Auto Back-up until a new probe is installed.
AL-2	Faulty evaporator probe	Replace the probe. The de-icing cycle can operate at 50% of the setting in step 7 of the Programming section.
AL-3	Faulty Food Probe	Replace the probe. The food probe mode will not operate, but the unit will operate in the timing mode.

4-1 300

4-2. TROUBLESHOOTING (Continued)

ALARMS

Display	Cause	Correction
AL-5	Temperature too low in the hold mode.	Faulty control board - replace control board. Faulty contactor - replace contactor.
AL-6	Temperature too high in the hold mode.	Faulty control board - Replace board. Door opened too much - Make sure door stays closed as much as possible.

Problem	Cause	Correction	
The evaporator is iced-up after a de-icing cycle.	Faulty De-icing Heater	Replace De-icing Heater	
	Evaporator temperature at end of de-icing cycle too low.	Increase the setting of step 8 in Section 3.	
	Maximum time of de-icing cycle too short.	Increase the setting of step 7 in Section 3.	
Too much water on evaporator fins.	The unit has been shut down without a de-icing cycle.	Start a de-icing cycle.	
Slow to decrease in temperature (decline in performance)	Compressor not working properly	Check compressor and replace if neccessary.	
performance	Evaporator fan not working properly	Check the fan and replace if neccessary.	
	Temperature of room too high.	Ventilate the room.	
	Not enough clearance around unit.	Change the location of the unit. (See section 2-4)	

300 4-2

4-2. TROUBLESHOOTING (Continued)

Problem	Cause	Correction
Slow to decrease in temperature (decline in	Condenser obstructed by dirt.	Clean the Condenser.
performance)	Evaporator iced up.	Perform a de-icing cycle.
	Refrigerating problem	Check refrigeration circuit and components.
Display temperature does not match the actual inlet air temperature. (No alarm)	In Frigiprobe mode, the display shows the product temperature.	Normal
temperature. (1 (o attains)	In timer mode, or hold mode, the probe may be showing the wrong temperature.	Ohm out the probe and check the reading with the table on page 4-5. Change the probe if it is out of tolerance.
Green compressor indicator	Compressor and condenser fan	_
light on and the compressor not working, or working sometimes.	do not work: - Faulty contactor	Check contactor and change if neccessary.
	- Faulty control board relay-no voltage across terminals 10-11.	Replace control board.
	Compressor works, but condenser fan does not:	
	- Faulty condenser fan	Replace fan.
	Compressor and condenser fan work together:	Chook itams and ranks as if
	- Faulty protection component for the compressor (overload protector, potential relay, start and run capacitor)	Check items and replace if neccessary.
	- Faulty overload protector of condenser fan.	Check fan and replace if necessary.

4-3

4-2. TROUBLESHOOTING (Continued)

Problem	Cause	Correction
Green compressor indicator light off and compressor is working.	Voltage across terminals 10-11 of control board: - Control board relay bad No voltage across terminals 10-11	Replace control board.
	of control board: - Faulty contactor. Replace contactor.	
Green fan indicator light on and fan(s) not working.	Voltage across terminals 8-9 of control board Fan or capacitor bad	Replace fan or its capacitor.
	- Fan thermo-switch tripped.	Allow the fan motor to cool to see if the fan comes back on. If the fan does not come back on, or it keeps tripping, replace the fan.
	No voltage across terminals 8-9 of control board: - Faulty control board relay.	Replace control board.
All indicator lights off and On/Off switch will not	Check electrical supply.	Plug unit into receptacle, or reset wall circuit breaker.
operate.	Fuse of control board blown.	Change the fuse.
	No voltage from the control board transformer.	Change the control board.
	Connector between the control board and display board not connected properly.	Check the connection.
	Bad wire in the connector between the control board and display board.	Replace the connector.

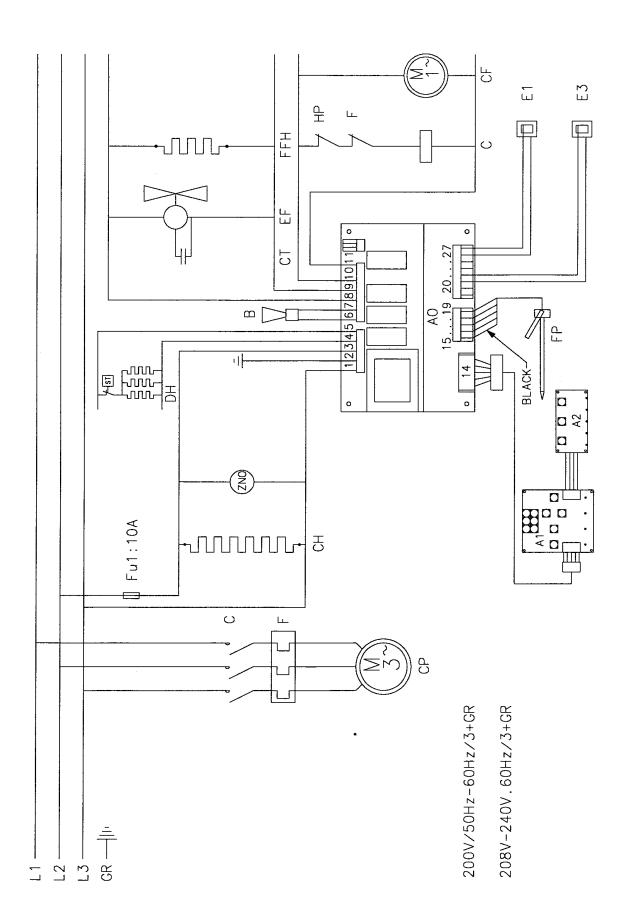
100 4-4

RESISTANCE-TEMPERATURE CONVERSION TABLE FOR PROBES

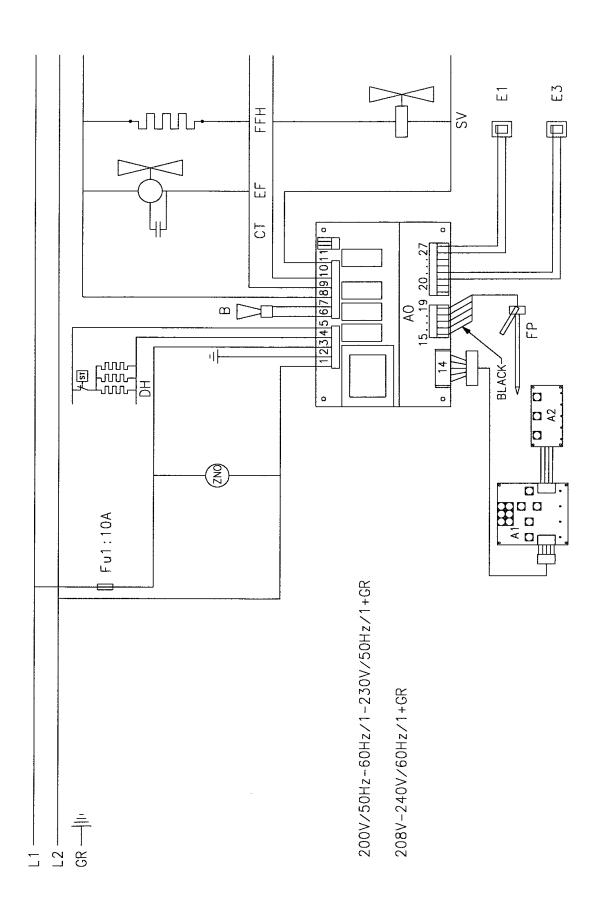
TEMP.	TEMP.	R	TEMP.	TEMP.	R	TEMP	TEMP.	R	TEMP.	TEMP,	R
°C	°F	ΚΩ	°C	°F	ΚΩ	°C	°F	ΚΩ	l °C	°F	ΚΩ
-40	-40	336.6	8	46,4	21.92	56	132,8	2.878	104	219,2	0.6050
-39	-38,2	315.0	9	48,2	20.88	57	134,6	2.774	105	221	0.5880
-38	-36,4	295.0	10	50	19.90	58	136,4	2.674	106	222,8	0.5714
-37	-34,6	276.4	11	51,8	18.97	59	138,2	2.580	107	224,6	0.555
-36	-32,8	259.0	12	53,6	18.09	60	140	2.488	108	226,4	0.5402
-35	-31	242.8	13	55,4	17.26	61	141,8	2.400	109	228,2	0.5252
-34	-29,2	227.8	14	57,2	16.46	62	143,6	2.316	110	230	0.5108
-33	-27,4	213.8	15	59	15.71	63	145,4	2.234	111	231,8	0.4968
-32	-25,6	200.6	16	60,8	15.00	64	147,2	2.158	112	233,6	0.4832
-31	-23,8	188.4	17	62,6	14.32	65	149	2.082	113	235,4	0.4702
-30	-22	177.0	18	64,4	13.68	66	150,8	2.012	114	237,2	0.4574
-29	-20,2	166.4	19	66,2	13.07	67	152,6	1.942	115	239	0.4452
-28	-18,4	156.5	20	68	12.49	68	154,4	1.876	116	240,8	0.4334
-27	-16,6	147.2	21	69,8	11.94	69	156,2	1.813	117	242,6	0.42.18
-26	-14,8	138.5	22	71,6	11.42	70	158	1.751	118	244,4	0.4106
-25	-13	130.4	23	73,4	10.92	71	159,8	1.693	119	246,2	0.3998
-24	-11,2	122.9	24	75,2	10.45	72	161,6	1.637	120	248	0.3894
-23	-9,4	115.8	25	77	10.00	73	163,4	1.582	121	249,8	0.3792
-22	-7,6	109.1	26	78,8	9.574	74	165,2	1.530	122	251,6	0.3694
-21	-5,8	102.9	27	80,6	9.166	75	167	1.480	123	253,4	0.3598
-20	-4	97.12	28	82,4	8.778	76	168,8	1.432	124	255,2	0.3506
-19	-2,2	91.66	29	84,2	8.408	77	170,6	1.385	125	257	0.3416
-18	-0,4	86.54	30	86	8.058	78	172,4	1.341	126	258,8	0.3328
-17	1,4	81.72	31	87,8	7.722	79	174,2	1.298	127	260,6	0.3244
-16	3,2	77.22	32	89,6	7.404	80	176	1.256	128	262,4	0.3162
-15	5	72.98	33	91,4	7.098	81	177,8	1.216	129	264,2	0.3082
-14	6,8	69.00	34	93,2	6.808	82	179,6	1.178	130	266	0.3006
-13	8,6	65.26	35	95	6.532	83	181,4	1.141	131	267,8	0.2930
-12	10,4	61.76	36	96,8	6.268	84	183,2	1.105	132	269,6	0.2858
-11	12,2	58.46	37	98,6	6.016	85	185	1.071	133	271,4	0.2788
-10	14	55.34	38	100,4	5.776	86	186,8	1.038	134	273,2	0.2720
-9	15,8	52.42	39	102,2	5.546	87	188,6	1.006	135	275	0.2652
-8	17,6	49.66	40	104	5.326	88	190,4	0.975	136	276,8	0.2588
-7	19,4	47.08	41	105,8	5.118	89	192,2	0.9452	137	278,6	0.2526
-6	21,2	44.64	42	107,6	4.918	90	194	0.9164	138	280,4	0.2464
-5	23	42.34	43	109,4	4.726	91	195,8	0.8888	139	282,2	0.2406
-4	24,8	40.16	44	111,2	4.544	92	197,6	0.8620	140	284	0.2348
-3	26,6	38.12	45	113	4.368	93	199,4	0.8364	141	285,8	0.2292
-2	28,4	36.20	46	114,8	4.202	94	201,2	0.8114	142	287,6	0.2238
-1	30,2	34.38	47	116,6	4.042	95	203	0.7874	143	289,4	0.2184
0	32	32.66	48	118,4	3.888	96	204,8	0.7642	144	291,2	0.2134
1	33,8	31.04	49	120,2	3.742	97	206,6	0.7418	145	293	0.2084
2	35,6	29.50	50	122	3.602	98	208,4	0.7202	146	294,8	0.2036
3	37,4	28.06	51	123,8	3.468	99	210,2	0.6994	147	296,6	0.1988
4	39,2	26.68	52	125,6	3.340	100	212	0.6792	148	298,4	0.1942
5	41	25.40	53	127,4	3.216	101	213,8	0.6596	149	300,2	0.1897
. 6	42,8	24.18	54	129,2	3.098	102	215,6	0.6408	150	302	0.1854
7	44,6	23.02	55	131	2.986	103	217,4	0.6226			

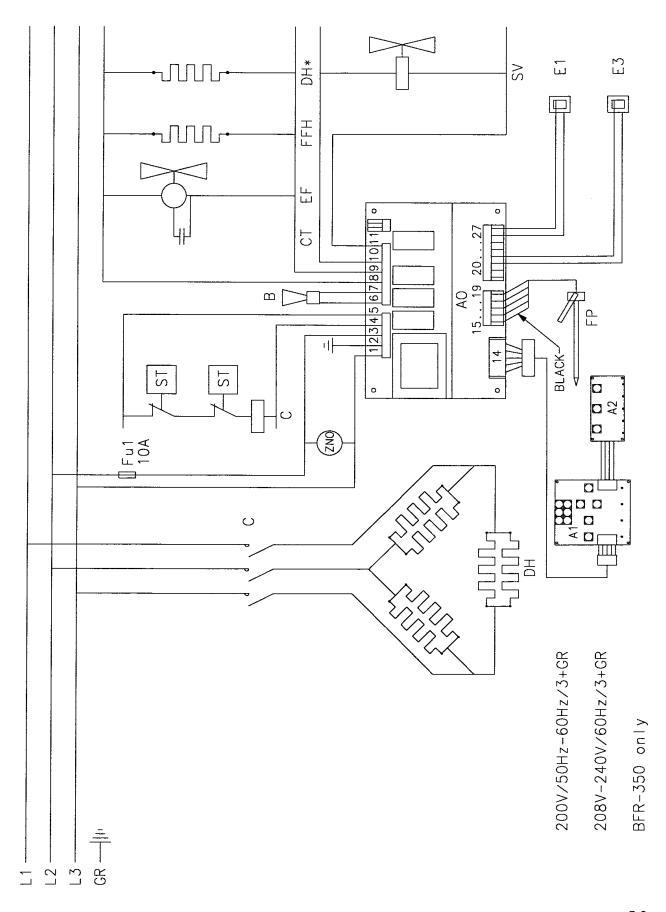
4-5





201 5-1





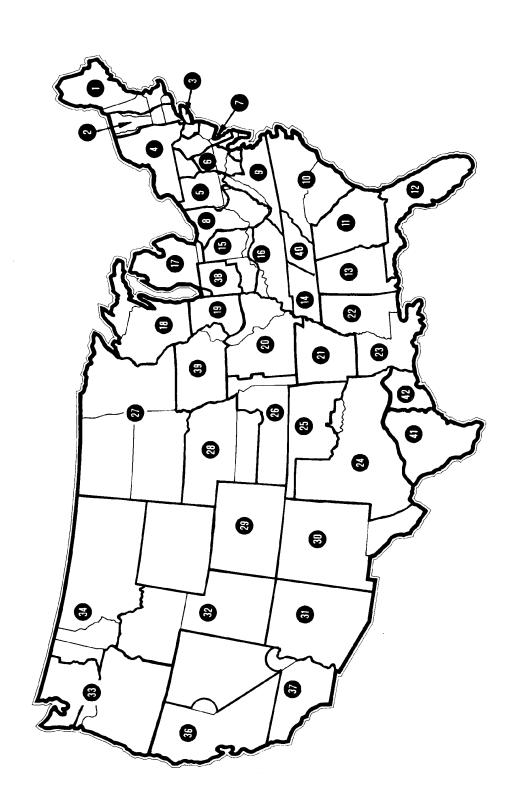
201

				Q	BFR/		
Item		ВС		BCC BCR BCC BC			
No.	Part No.	Description	140	140	175	175	350
1	9504.0205	Control PC Board	1	1	1	1	1
1	9503.3692		1 1	1		1	
2 3		Display PC Board	1	1	1 1	1	1
	9503.3700	Auxiliary Display Board	1			1	1 1
4	9503.3759	Connecting Cable	1	1	1	1	
5	9503.7719	Communication Board		1	1	1	1
6	9503.8436	Printer C. 11		1	1	1	1
7	9503.8428	Printer Connecting Cable		1	1	1	1
8	9503.3726	Buzzer - 240V - UL		1	1	1	1
9	9500.7936	Drier N	1	-	1	-	-
10	9503.6232	De-icing Heater - UL - 500W	3	3	3	3	6
11	9500.7209	Air Probe		1	1	1	1
12	9500.7209	Evaporator Probe	1	1	1	1	1
13	9502.6563	Run Capacitor - 4 mF	3	3	3	3	-
14	9560.0334	Evaporator Fan	3	3	3	3	4
15	9505.3963	Evaporator Fan Grid - UL	3	3	3	3	4
16	9502.0400	Frigiprobe	1	1	1	1	1
17	9503.3643	Fuse Holder	1	1	1	1	1
18	9503.3650	Fuse - 10A	1	1	1	1	1
19	9503.0185	Varistor V320LA20A	1	1	1	1	1
20	9503.3601	Control Panel Decal	1	1	1	1	-
20	9503.6224	Control Panel Decal - BCR-350	-	-	-	-	1
21	9503.0920	Contactor - UL/CSA - 3P 23A/AC3	-	-	1	-	1
21	9503.0912	Contactor - UL/CSA - 3P 12A/AC3	1	-	-	-	-
22	9503.3304	Condenser Fan Motor-25W, 230V, 60 Hz	-	-	1	-	-
22	9502.1846	Condenser Fan Motor-120W, 230V, 60 Hz	1	-	-	-	-
23	9501.8644	Water Condenser - 115V	-	-	1	-	-
24	9503.7784	Condenser - UL	1	-	-	-	-
25	9503.3312	Fan Blade for Condenser - BCC-175	-	_	1	-	-
26	9503.6190	Compressor - BCC-175	-	_	1	-	-
26	9502.1762	Compressor - BCC-140	1	_	-	_	-
27	9502.8668	Evaporator - BCC/BCR-175	_	_	1	1	-
27	9501.6283	Evaporator - BCC/BCR-140	1	1	_	_	-
27	9502.8676	Evaporator - BCR-350	_	_	_	_	1
28	9503.6174	Thermal Overload Relay - BCC-175	_	_	1	_	_
28	9503.6158	Thermal Overload Relay - BCC-140	1	_	_	_	_
29	9503.6257	F. Frame Heater-BCC-175; BCR-175/350	_	_	2	2	2
29	9503.7735	Front Frame Heater-75W-BCC/BCR-140	1	1	_	_	_
30	9502.5995	Expansion Valve-BCC-175; BCR-175/350		_	1	1	2
30	9502.6951	Expansion Valve - BCC/BCR-140	1	1	_		_
30	9502.5383	Expansion Valve - BFR-350			_	_	2
31	9500.8850	Nozzle-Exp. Valve-BCC-175; BCR-175/350	_		1	1	2
31	9500.8843	Nozzle-Expansion Valve - BCC/BCR-140	1	1	1		
J1	7500.0045	1102210-Expansion valve-Dec/Deix-140	1	1		_	_

5-4 603

							BFR/
Item	Part		BCC	BCR	BCC	BCR	BCR
No.	No.	Description	140	140	175	175	350
31	9500.8967	Nozzle-Expansion Valve BFR-350					2
32	9500.7993	Water Pressure Valve - BCC-175	_	_	1	_	_
33	9503.6182	High Pressure Switch - BCC-140	1	-	1	-	-
34	9503.0182	Liquid Receiver - BCC-140	1	_	-	-	_
34	9502.5045	Door - BCC/BCR-175/350	1	-	1	- 1	- 1
34	9550.6630	Door - BCC/BCR-173/330 Door - BCC/BCR-140	1	1		1	1
35			1	1	- 1	1	-
	9543.0831	Front Panel for Printer - BCC/BCR-175	1	-	_	1	-
35	9542.5989	Front Panel for Printer - BCC/BCR-140	1	1	-	-	-
36	9541.6053	Vert. Evap. Deflector-BCC/BCR-175	-	-	1	1	-
36	9541.7671	Vert. Evap. Deflector-BCR-350	-	-	-	-	1
37	9505.3674	Door Seal - BCC/BCR-175/350	-	-	1	1	1
37	9505.4466	Door Seal - BCC/BCR-140	1	1	-	-	-
38	9501.9998	Floor Door Seal - BCC/BCR-175	-	-	1	1	-
39	9541.8919	Left and Right Side Panels - BCC/BCR-175	-	-	2	2	-
40	9542.5963	LH Panel-BCC-140; LH & RH-BCR-140	1	2	-	-	-
41	9542.7225	Right Side Panel - BCC-140	1	-	-	-	-
42	9543.0419	Top Cover with Condensing Unit-BCC-140	1	-	-	-	-
42	9543.0518	Top Cover w/o Condensing Unit-BCR-140	-	1	-	-	-
42	9543.0427	Top Cover with Condensing Unit-BCC-175	-	-	1	-	-
42	9543.0542	Top Cover w/o Cond.Unit-BCR-175/350	-	-	-	1	1
43	9502.8601	Door Latch - BCC/BCR-175; BCR-350	-	-	1	1	1
43	9501.4551	Door Latch with Strike - BCC/BCR-140	1	1	-	-	-
44	9502.8619	Door Strike - BCC/BCR-175; BCR-350	-	-	1	1	1
45	9502.8585	Door Hinge - BCC/BCR-175; BCR-350	-	-	2	2	1
45	9501.4601	Door Hinge - BCC/BCR-140	1	1	-	-	-
46	9502.8593	Hinge Shim - BCC/BCR-175; BCR-350	-	-	2	2	1
47	9503.6240	High Limit Safety Thermostat	1	1	1	1	2
48	9503.4583	Valve Body - BCR-140/175/350	-	1	-	1	1
40	9503.4591	Coil - BCR-140/175/350	-	1	-	1	1

201 5-5



For Sales or Service Please Contact The Nearest Henny Penny Distributor

- General Services

 100 Hicks Ave.
 Medford, MA 02155
 (800) 233-1033
- 2. Art Cole Associates Golden Street Industrial Park Meriden, CT 06450 (203) 237-7177
- 3. Globe-Monte Metro, Inc. 47-02 Metropolitan Avenue Ridgewood, NY 11385 (718) 786-5760
- 4. Guertin Dist. Inc.
 5 Technology Drive
 East Syracuse, NY 13057-9713
 (315) 437-4928
 (800) 468-6336
- 5. Kreiser Distributing Co. 13800 Lincoln Highway N. Huntington, PA 16652 (724) 863-3360
- 6. AFS Equipment Company 9130-X Red Branch Road Columbia, MD 21045 (410) 964-3770 (800) 969-3770
- HP Sales & Service Co.
 200 Rittenhouse Circle, 4-East Bristol, PA 19007 (215) 785-3250
 NJ Watts (800) 477-4379
- 8. Astro Food Equipment 7901 Old Rockside Rd.) Independence, OH 44131 (216) 619-8821 (800) 367-4237
- 9. Carlisle Food Systems, Inc. 11020 Lakeridge Pkwy. Ashland, VA 23005 (804) 550-2169
- 10. Price-Davis, Inc.
 Route 1, Highway 27
 Iron Station, NC 28080
 (509) 928-8815
 (704) 732-2236
 (800) 456-1014
- 11. Big A Distributors, Inc. P.O. Box 1283 Forest Park, GA 30051 (404) 366-6510 (800) 222-0298
- 12. W.H. Reynolds
 Distributors, Inc.
 4817 Westshore Blvd.
 Tampa, FL 33609
 (813) 873-2402
 Miami-(954) 845-0841
 Jacksonville-(904) 781-9054
 FL Watts (800) 282-2733
- 13. Ber-Vel Distributing Co. Inc. P.O. Box 9943 Birmingham, AL 35220 (205) 681-1855

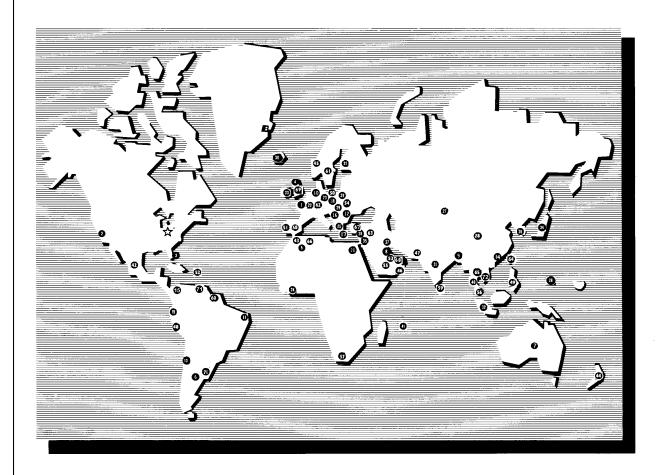
- 14. Barnett Supply
 2089 York Ave.
 Memphis, TN 38104
 (901) 278-0440
 Nashville, TN
 (615) 242-6451
 Scotsman Supply
 516 5th Ave., South
 Nashville, TN 37203
- (615) 242-6451 **15. St. Clair Supply Company**231 East Main Street
 Eaton, OH 45320
 (937) 456-5500
 (800) 762-2968
- 6. Dine Equipment Co. 3110 Preston Hwy. P.O. Box 34038 zip 40232 Louisville, KY 40213 (502) 637-3232 FAX (502) 637-5177
- 17. United Marketing Assoc. 11877 Belden Court Livonia, MI 48150 (734) 261-5380
- 18. T&H Distributors 1235 Parkview Green Bay, WI 54304 (920) 339-9838
- Food Service Solutions, Inc. 1682 Barclay Blvd.
 Buffalo Grove, IL 60089 (847) 459-8040 (847) 459-7942
- 20. MEC 2511 Cassens Dr. Fenton, MO 63026-2547 (636) 343-0664 (800) 397-1515
- 21. Delta Supply Co., Inc. 3315 W. Roosevelt Rd. Little Rock, AR 72204 (501) 664-4326
- 22. Dixie Supply 490 Julianne St. Bldg. A-2 Jackson, MS 39201 (601) 354-3025
- 23. Beaullieu Refrigeration Inc. 200 North Luke St. Lafayette, LA 70506 (337) 235-9755
- 24. S.L.É. Corporation 1110 Avenue "H" East Arlington, TX 76011 (817) 640-7999
- 25. Brooks Industries 4420 S.W. 29th St. Oklahoma City, OK 73119 (405) 685-7200
- 26. B & D Dist. 19915 W. 161st St. Suite D Olathe, KS 66062 (913) 768-8588 FAX 913-768-8855

- 27. PHT Systems 1801 Highway 8 Suite 120 New Brighton, MN 55112 (651) 639-0368
- 28. Mid-Nebraska Restaurant Supply Co. 1415 S. Webb Road Grand Island, NE 68802 (308) 384-5780
- 29. Robert G. Wood & Co. 2080 W. Cornell Ave. Englewood, CO 80110 (303) 761-0500 (800) 358-3061
- 30. Open Territory
- 31. CPE-USALCO 1310 West Drivers Way Tempe, AZ 85284 (480) 496-6995
- 32. National Equipment Corp. 242 West-3680 South Salt Lake City, UT 84115 (800) 266-5824 (800) 955-9202
- 33. The Nicewonger Co. 19219 West Valley Hwy Suite M103 Kent, WA 98032 (800) 426-5972 (425) 656-0907 FAX
- 34. Tri-State Market Supply 11115 E. Montgomery, Suite A Spokane, WA 99206 (509) 928-8815 (877) 828-4268
- 36. Western Pacific
 Distributors, Inc.
 19422 Cabot Boulevard
 Haywood, CA 94545
 (510) 732-0100
- 37. Don Walters Company 2121 S. Susan Street Suite A Santa Ana, CA 92704 (714) 979-5863
- 38. Troyer Foods, Inc. 17141 State Route 4 Goshen, IN 46526 (219) 533-0302
- 39. Tri-City HP, Inc. 527 West Fourth St. Davenport, IA 52801 (319) 322-5382
- 40. Certified Commercial Service & Equipment (CCSE) 6031-A Industrial Heights Drive Knoxville, TN 37909 (865)-546-8778
- 41. Gower Distributors, Inc. P.O. Box 4804 Box 216K Rt. -4 Victoria, TX 77903 (361) 573-9777

- **42. Top-Line Distributors** 1501 College Ave. Houston, TX 77585 (713) 946-6008
- 43. DSL Inc., Canada
 14520 128th Ave.
 Edmonton, Alberta
 Canada T5L3H6
 (403) 452-7580
 (Alberta, British Columbia,
 Manitoba, Saskatchewan,
 Yukon, & N.W. Territories)
- 44. Taylor Freezers, Inc.
 52 Armthorpe Rd.
 Brampton, Ontario
 Canada L6T5M4
 (905) 790-2211
 (Ontario, Montreal, and
 Maritime Provinces)
- 45. Bazinet Taylor Ltee. 4750 Rue Bourg Ville St. Laurent Quebec, Canada H5T 1J2 (514) 735-3627 (Quebec only)

If Further Assistance Is Needed Please Contact:

Henny Penny Corporation 1219 U. S. Route 35 West Eaton, Ohio 45320 1-800-417-8417 Fax 1-800-417-8402



Henny Penny
International Distributor Network

Henny Penny International Distributor Network

U.S. Headquarters

Henny Penny Corporation 1219 U.S. Route 35 West Eaton, OH 45320 USA Telephone: 937-456-8417 Fax: 937-456-1860

Representative Office

Henny Penny Corporation Representative Office Parc d'Entreprises de l'Esplanade 2bis Rue Paul Henri Speak Saint Thibault des Vignes 77462 Lagny sur Mame Cedex, France Telephone: 33 (1) 60075600 Fax: 33 (1) 60071489

U.S. Export Centers

Feco International Company 20 North San Mateo Drive, Suite 9 San Mateo, CA 94401 USA Telephone: 415-348-3499 Fax: 415-348-3575

Caribbean Islands & Central America (excluding Puerto Rico) Total Equipment Suppliers 9550 NW 41st St. Miami, FL 33178 Telephone: 305-718-9550 Fax: 305-718-9505

Algeria

SOMAB

Y1 Rue Mahmoud Boudjatit (Oasis) Ager, Algeria Tel: 213-21-23-3051/3052 Fax: 213-21-23-3161

Argentina

Oditec S.A. Augstin Alvarez 2128 1602 Florida Buenos Aires, Argentina Telephone: (541) 796-0820 Fax: (541) 796-2009

Australia

J.L. Lennard Pty. Ltd. 937-941 Victoria Rd. West Ryde NSW 2114 Sydney, Australia Telephone: 617-3272-4744 Fax: 617-3272-4799

Bahrain

Mohammed Jalal Catering Old Palace Road P.O. Box 1335 Manama, State of Bahrain Telephone: 973-53-45-39 Fax: 973 53-14-78

Bangladesh

Puffin International Ltd. 3691B Elephant Rd. Swarankika Plaza 4th Floor-Dhaka 1205 Dhaka, Bangladesh Telephone: 8802-863117 Fax: 880-2-867563

Belgium Engelen-Heere N.V. Industrialpark Terbekehof Fotografielaan 14 B-2610 Antwerpen (Wilrijk) Telephone: 323-825-5577 Fax: 323-825-3702

Brazil

Pesin Equipment Food Service R. Olavo Bilac 188/198 Sao Caetano Do Sul - SP Telephone:55-11-7690-1470 Fax: 55-11-7690-1466

Bulgaria

EC.E. - CAIX
23A Rue Oborichte
Sofia 1604, Bulgaria
Telephone: 19-359-2-946-1479 Fax: 19-359-2-946-1669

IMAHE Manuel Montt 1154 Providencia Santiago, Chile Tel: 562-341-4953/5707 Fax: 562-274-8567

China

Bonny Foodservice Products Flat C, 8/F, Yeung Yiu Chung Industrial Bldg., No. 20 Wang Hoi Rd. Kowloon Bay, Kowloon Hong Kong Telephone: 852-796-5616 Fax: 852-799-8490

Colombia

Industrial Taylor Ltda. Transversal 93, Numero 64-24 Apartado Aereo 95075 Bogota D.E., Colombia Telephone: 57 (1) 4340016 Fax: 571-223-2642

Crotia

15. New Rok Opatija M. Tita 15 51410 Opatija, Crotia Telephohe: 385-51-701-251 Fax: 385-51-701-251

Cyprus

AMF Chistofides Ltd. 104A Prodromos Str. P.O. Box 25100 Nicosia, Cyprus Telephone: 357-2-454-380 Fax: 357-2-454-088

Czech Republic

17. Citus Argentinska 20 CZ 4170 00 Pragues 7 CZECH REPUBLIC Telephone: 420-2-667-10-561 Fax: 420-2-667-10-557

Denmark

Inter-Gastro A.S. Midtager 18 2605 Brondby Denmark DK2605 Telephone: 45-43292000 Fax: 45-43292001

Equindeca Cia. Ltda. Hotel El Conquistador Gran Colombia 6-65 Cuenca, Ecuador Telephone: 593-7-831788 Fax: 593-7-843221

Egypt Con Trade Centre 3A Ramsis Street Maaroof Building #83 & #62 Cairo, Egypt Telephone: 20 (2) 770642/762551 Fax: 20 (2) 756258

Estonia

Sisustaja As Tihniku 5 11625 Tallinn, Estonia Telephone: 372-6502300 Fax: 372-6502301

Finland

22. Monilaite Oy P.O. Box 27 Salpakuja 6 SF-01200 Vantaa, Finland Telephone: 358-9-877-0100 Fax: 358-9-877-01099

France

Diffusion International de Materiel (DIM) Parc d'activité Clemenceau Chemin du Chateau d'Eau B.P. 4009 59704 Marcq-En-Baroeuil Cedex, France Telephone: (33) 20890000 Fax: (33) 20727355

Germany

Sesjak KG Wullener Feld 9a D-58454 Witten Germany Telephone: 49-2302-697077 Fax: 49-2302-698451

Ghana

DRT Ghana E6619 Ablade Road Kanda Estate P.O. Box C2074 Accra-Cantonments, Ghana Telephone: 233-2123-3949 Fax: 233-2123-1380

Greece Domestica S.A.

26. 65 Stournara Str. Athens 10432, Greece Telephone: 30-15-24-30-14/15 Fax: 30-15-22-91-58

Pacific Technical Service, Inc. New Commercial Building #979 Rt. 16, Suite B-3 Barrigada, Guam 96913 Telephone: 6710632-5000 Fax: 671-632-3333

Holland

Englelen-Heere B.V. Straatveg 85, Postbus 35020 3005 DA Rotterdam, Holland Telephone: 311-042-23077 Fax: 311-042-23435

Hong Kong Bonny Foodservice Products Flat C, 8/F, Yeung Yiu Chung Industrial Building #20 Wang Hoi Road Kowloon Bay, Kowloon, Hong Kong Telephone: 852-796-5616 Fax: 852-799-8490

Hungary Hotex Service H-2094 Nagykovacsi Kossith Lajos u. 1. Hungary Telephone: 36-263-56653/89463 Fax: 36-26389463

Iceland

A. Karlsson H. F. Brautarholti 28 105 Reykjavik, PO Box 167 Iceland Telephone: 354-560-0900 Fax: 354-560-0901

India

AISHWARYA Trust Complex, 10 OVG Rd Basavanagudi Bangalore 560004, India Telephone: 91-80-667-7576 Fax: 91-80-667-7576

> Int'l. Refrigeration Corp 7 Netaji Subhash Marg Darya Ganj New Delhi 110002, India Telephone: 91-11-3275651 Fax: 91-11-622182**7**

Indonesia

33. P.T. Gema JL. Raya Bloulevard Raya Block IOA 2 No. 27 Kelapa Gading Permai Jakarta 14240, Indonesia Telephone: 62-21-4532077 62-21-4508910 Fax: 62-21-4532586/4530777

Ireland

Martin Food Equipment Ltd. Gaskin Business Park Coes Road Dundalk, Louth County Telephone: 353-42-30366 Fax: 353-42-30370

Italy

Allegra SRL Corso Matteotti. 5 - 10121 Torino, Italy Telephone: 39-011-540264 Fax: 39-011-533779

Japan

Toei Kogyo Co. Ltd. 4F, Nissay Nishi-Gotanda Building 24-5 Nishi-Gatanda 7-Chome Shinagawa-ku, Tokyo 141-0031 Japan Telephone: 813-3779-1081 Fax: 813-3779-1638

Awar Trading Est PO Box 962227 Amman 11196, Jordan Telephone: 962-6-55-19-610 Fax: 962-6-55-19-605

Korea

Ohjin Corporation 3rd Floor, Hee Jung Building 1635-0 Seocho-dong Seocho-ku C.P.O. Box 3252 Seoul 137-070, Korea Telephone: 82-2-5850441 Fax: 82-2-5874197

Kuwait

Mabrook Hotel Supplies Co. PO Box 43832 Hawalli 32053 Kuwait Telephone: 965-481-8242 965-483-01648 Fax: 965-483-4314

Lebanon

Pro Kitchen Cahlfoun Building Kaslik - Main Road PO Box 1066 Jounieh Lebanon Telephone: 961-9-635-077 Fax: 961-9-635-059

Lithuania

Master Group Baltic Master Dariaus Ir Girena 175 2038 Vilnius, Lithuania Telephone: 3702-306-528/529 Fax: 3702-306-533

Malaysia

SCC Corp. Sdn. Bhd. 19-21 Jalan Hujan Taman Overseas Union 58200 Kuala Lumpur, Malaysia Telephone: 60-3-77828384 Fax: 60-3-77818561

Malta

C & H Bartoli Ltd. 43 232 The Strand Gzira Gzros, Malta Telephone: 356-342-584 Fax: 356-342-569

Mauritius Island

(Mauritius, Reunion Island, Seychelles) Hassam Moussa Rawat 10 Bourbon Street P.O. Box 492 Port Louis, Mauritius Island Telephone: 160 (230) 2080024 Fax: 160-230-2080147

Central Mexico Metro Mexico City
Cavimex S.A. de C.V.
Revillagigedo No. 61 Col Centro
Mexico, D.F. 06070 Mexico Telephone: 525-521-4200 Fax: 525-510-2791

Pacific

Micro Herros De Occidente, S.A. de C.V. Av. Juan Palamar y Arias #83 Col. Jardines Vallarta Zapopan, Jalisco, Mexico C.P.45020 Telephone: 52-3-629-54-05 Fax: 52-3-673-29-43

Southeast Equipo Para El Mercado S.A. de C.V Calle 55 No. 501-B por 60 y 62 Merida, Yucatan, Mexico C.P. 97000 Telephone: 52-99-236500 Fax: 52-99-286649

Morocco Electra

46. Boulevard AHL Loghlam BP 25698 Sidi Bernoussi - Ain-Sebaa Casablanca Morocco Telephone: 212-22-753-531 Fax: 212-22-753-554

New Zealand

Taylor Equipment Limited 4 Ponuz Place Mt. Wellington Auckland, New Zealand Telephone: 64 (9) 5733377 Fax: 64 (9) 5730841

Norway

Grillfagmannen A.S. Ostensjoveien 44 N-0667 Oslo 6, Norway Telephone: 47 (2) 651410 Fax: 47 (2) 720017

Oman

Mohsin Haider Darwish LLC 49 P.O. Box 880 Ruwi, Code 112 SULTANATE OF OMAN Telephone: 968-703411 Fax: (968) 789927

Pakistan

The Equipment Company Ground Floor, Dadabhoy Centre 60. Sharea Faisai, Karachi 75530 Pakistan Telephone: 922-1-778-1778/2778 Fax: 922-1-587-0456/778-2777

Peru

Importadora Tecnica Comercial C.R. Ltda. Jr. Marcos de Aramburu #595 Lima 17, Peru Telephone: 51-1-226-2124 Fax: 51-1-275-2689

Philippines

HKR Equipment Corp. 2nd Floor, THC Bldg. 2176 Primo Rivera St. La Paz, Makati City, Philippines Telephone: 632-899-4511 Fax: 632-899-4541

Poland

53.

I. F. E. Rydygiera 12 01 793 Warsaw, Poland Telephone: 48-3912-3373 42-22-663-4820/4069 Fax: 48-3912-3373

Portugal

Restaurotel AV Da Republica 83 C 1050 243 Lisboa Portugal Telephone: 351 7967116/7/8/9 FAX: 351 7933982

Puerto Rico Progressive Sales and Service PO Box 10876 Caparra Heights Station San Juan, Puerto Rico 00922-Telephone: 787-782-7474 Fax: 787-793-6479

Qatar

Tristar Group C.R. No. 6778 P.O. Box 4746 Doha, Qatar Telephone: 974-4664433 Fax: 974-4365365

Romania

Delta Technologies Romani S.A. Sector 6, 20 Constructorilor Blvd. Bloc 20 A, sc. B 7th Floor Apt. 64 Bucharest, D599 Romania Telephone: 401-220-4261 Fax: 401-220-3990 US Address: 115 Main St. Mishawaka, In. 46544 Telephone: 219-256-3783 Fax: 219-256-7130

Saudi Arabia

Commercial Center Development & Economy P.O. Box 1210 Jeddah 21431, Saudi Arabia Telephone: 966 (2) 629-1857 Fax: 966 (2) 629-1860

Senegal

Breading Systems Co. C/ Ripoche,14 35007 Las Palmas Spain

Telephone: 34-9-28-22-43-86 Fax: 34-9-28-27-56-90

Singapore Simplex Pte. Ltd. Block 1, Lorong 8 Toa Payoh Industrial Park 01-1383 Singapore 319053 Telephone: 65-251-6241 Fax: 65-253-8814

Shopfit (S) Pte. Ltd. Blk 623 Aljunied Industrial Complex Unit 02-09 Singapore 389835 Telephone: 65-7410911 Fax: 65-7438911

South Africa

Foodserv "CC" PO Box 55269 Northlands 2116, Republic of South Africa Telephone: 27 (11) 616-5183, Fax: 27 (11) 616-8287

Spain 62

Adisa Tuset, 8-10 08006 Barcelona, Spain Telephone: 34-93-415-0018 Fax: 34-93-218-1782

Sri Lanka

Sperrys Commercial Equipment 1014 Parliament Road Etul Kotte Kotte/Colombo, Sri Lanka Telephone:941-873-0561 Fax: 941-863-8361

Suriname

Tessco N.V. Oude Charlesburgweg #47 Paramaribo Suriname Telephone: 597-473366/477388 Fax: 597-473366

Sweden

Eurospice AB Box 5050 65. Hejargatan 6 632 29 Eskilstuna, Sweden Telephone: 46 (16) 125600 Fax: 46 (16) 131390

Switzerland

Stuppen Fast Food GmbH Oberneuhofstrasse 8 CH-6340 Baar, Switzerland Telephone: 41-41-761-5052 Fax: 41-41 761-7210

Syria

66.

Lahham Trading & Contracting Hamra Str. Omyad Building P.O. Box 2960 Damascus Syria Telephone: 963-11-331-2251 Fax: 963-11-331-2252

Taiwan

Feco Corporation 420, 11 F Keelung Rd. Sec. 1 Postal Code 110 Taipei, Taiwan Republic of China Telephone:886-2-2758-2288 Fax: 886 (2) 2758-2297

Thailand

Fieco Company Ltd. 43/524-526 Amarinnivej 1 Anusaovari Laksi Phaholoyothin Road Bangkok 10220 Thailand Telephone: 66-2-521-3824/3878 Fax: 66-2-552-0833

Tunisia

Semci 16, Rue Aziz Taj 1101 Tunis RP, Tunisia Telephone: 216 -133-1501 Fax: 216-133-0698

Turkey Klimatek Inonu Caddesi, Opera Palas 73/5 80090 Gumussuyu Istanbul, Turkey Telephone: 90-212-245-1812 90-212-293-7892 Fax: 90-212-293-3903

United Arab Emirates

Habtoor International P.O. Box 55332 Dubai, United Arab Emirates Telephone: 971-4-272-1212 Fax: 971-4-272-2255

United Kingdom

Servequip Products Ltd. 214 Purley Way GB-Croyden CRO 4XG, England Telephone: 44-208-6868855 Fax: 44-208-6817509

Uruguay Tecnoland S.A. Dr. José Scorsería 2740 CP 11300 Montevideo, Uruguay Telephone: 598-2-7105900 Fax: 598-2-7105900

Venezuela

Prefer, C.A. Avenida Presidente Medina Edificio Prefer, Local No. 44 Entre Calles Chile y Progreso urb. Los Acacias Caracas 1040, Venezuela Telephone: 58-212-633-6933/2801 Fax: 58-212-632-6711

Vietnam

Cao Sinh Pte Block 1, Lorong 8 Toa Payoh Industrial Estate #01-1383 Singapore 319053 Telephone: 65-2516241 Fax: 84-2538814

Yemen Mukiriani Sana'a PO Box 8150 Sana'a Yemen Telephone: 967-1-230-675 Fax: 967-1-230-929